

DETAILED ACTION

Response to Amendment

Applicants arguments filed on December 28, 2007. Claims 1-6, 8-16, 17-19 are pending for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-6, 8-13-16, 17-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Memmott et al (US Patent 6,560,591 B1).

As per claim 1, Memmott discloses a computer-implemented method performed by a computing device for querying a data structure in a distributed computing environment, comprising:

preparing a query specifying the constraints to be applied on at least two different data structure wherein each data structure is stored in a different data format type (col. 2, lines 12-18 that "it is possible that data responsive to a query relating to any particular subject may be available from more than one providers...Likewise, a request for a stock quotation may be answered similarly by a number of financial information sites". Memmott further discloses that "multiple data providers is that responses by different providers to the same query may represent similar values yet appear completely different." For example, the CIM's scheme, free disk space is reported in units of bytes, while in the DMI scheme, free disk space is reported in units of kilobytes (col. 7, lines 38-43) ;

sending the query to at least two different objects (col. 3, lines 50-53, a data resolver forwards the received query request to a data providers 130a-130n), **wherein each object maintains one of the at least two different data structures in-memory and determines whether the in-memory data structure maintained by each object satisfies the query** (Fig. 7, col. 6, lines 3-14, determination whether data responsive to the query is available from the corresponding data provider);

receiving the results from the query from the at least two different objects (col. 6, lines 20-24, once data responsive to the query has been obtained, a response based on the data is transmitted to the data requestor).

As per claim 2, Memmott teaches wherein the query is specified as a text string (col. 4, lines 4-9, col. 5, lines 43-52).

As per claim 3, Memmott teaches wherein the data structure is stored as one of XML, database tables, and a programming language data structure (col. 3, lines 31-35).

As per claim 4, Memmott teaches receiving a data value from at least one digital device indicative of the storage of the value in said digital device wherein one of the at least two different objects resides on the digital device (col. 3, lines 35-40).

As per claim 5, Memmott teaches the digital device comprises one of a personal computer, personal digital assistant, video tape recorder, a display device, and an MP3 player (col. 4, lines 38-52).

As per claim 6, Memmott teaches wherein the query is sent in the form of a message over a data network (col. 5, lines 43-52).

Claim 8 is rejected by the same rationale as state in claim 1 arguments.

Claims 9-12 have similar limitations as claims 2-5; therefore, they are rejected under the same subject matter.

As per claim 13, Memmott discloses a method for use in a digital device in a distributed system, comprising:

coupling the digital device to a communication network (Fig. 1, data providers 130a-130n);

storing a value in a data structure in said digital device (col. 3, lines 33-35, col. 4, lines 37-53, as distributed schemes, wherein the types of data stores in data

providers 130, such as data relates to the capacity of a DVD drive, a hardware device, storage device, etc.), **said data structure defined by a programming language data type definition** (col. 3, lines 39-41, an object class, a subclass);

receiving a query specifying a query data type and a query value (col. 3, lines 26-41, a query be formatted in object-oriented formats such as Managed object format and syntaxes such as XML, wherein the query may conform to at least one among the distributed management schemes, wherein the query is received by the data resolver and forwards a query request from a requestor to a data provider);

comparing the query data type to the data structure data type and the query value to the value stored in the data structure (Fig. 7, col. 6, lines 3-14, determination whether data responsive to the query is available from the corresponding data provider);

indicating in a response to the query whether the query data type matches the data structure data type and whether the query value matched the value stored in the data structure (col. 6, lines 20-24, once data responsive to the query has been obtained, a response based on the data is transmitted to the data requestor).

As per claim 14, Memmott teaches wherein the programming language is one of a procedural language and an object oriented language (col. 3, lines 28-30).

As per claim 15, Memmott teaches wherein the programming language is one of an interpreted language and a compiled language (col. 3, lines 28-30).

As per claim 16, Memmott teaches wherein the object oriented language is one of JAVA, C#, CLR, and C++ (col. 3, lines 28-30).

Claims 17-19 have similar limitations as claims 2, 5-6; therefore, they are rejected under the same subject matter.

Response to Arguments

Applicant's arguments filed December 28, 2007 have been fully considered but they are not persuasive.

Applicants argue that the claim requires the data structures to be of different formats and each data structure is stored in a different data format type because Memmott discloses that the query to be of different format types.

In response, the examiner respectfully disagrees. Memmott discloses at column 2, lines 12-18 that "it is possible that data responsive to a query relating to any particular subject may be available from more than one provider...Likewise, a request for a stock quotation may be answered similarly by a number of financial information sites". Memmott further discloses that "multiple data providers is that responses by different providers to the same query may represent similar values yet appear completely different." For example, the CIM's scheme, free disk space is reported in units of bytes, while in the DMI scheme, free disk space is reported in units of kilobytes (col. 7, lines 38-43). As seen, Memmott teaches more than one data providers, each has different scheme to maintain different data format type, that is the CIM's scheme free disk space is reported in units of bytes, while in the DMI scheme, free disk space is reported in units of kilobytes, both have different data structures (i.e., CIM scheme or DMI scheme), but be applied by the same query. Accordingly, Memmott teaches the claim elements

"a query...to be applied on at least two different data structures, wherein each data structure is stored in a different data format type".

b.) Applicants argue that Memmott fails to describe how the data type match information is returned because Memmott teaches that data responsive to the request is transmitted to the requestor.

In response the examiner respectfully disagrees. Further, Applicants were directed to Memmott's Fig. 7, because it states that query characteristics were examined and indication in response to the query was determined by "yes" "no". A determination was made to the request is whether the data responsive to the query available from data providers, and if not, indicating an indicate error. Thus, Memott does teach the claimed limitations "indicating in a response to the query whether the query data type matches the data structure data type and whether the query value matched the value stored in the data structure."

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2168

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBBIE M. LE whose telephone number is (571)272-4111. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DEBBIE M LE/

Primary Examiner, Art Unit 2168

March 31, 2008.